Listing of Claims:

What is claimed is:

1. (currently amended) A method for determining fluid chemistry of formation fluid in earth formation surrounding a borehole, the method comprising:

in a formation tester having a reagent container coupled to a fluids analyzer via a flow line, storing analytical reagent in ~~a~~ the reagent container ~~coupled to a fluids analyzer via a flow line~~;

transporting the formation tester downhole;

drawing formation fluid into the flow-line; and

while the formation tester remains downhole:

moving a reacted mixture of formation fluid and analytical reagent fluid through a spectral analyzer cell in the fluids analyzer; and

performing ~~reagent injection~~ spectral analysis on the reacted mixture.

2. (currently amended) A method according to claim 1, ~~wherein performing reagent injection spectral analysis includes~~ including the further step of injecting reagent into formation fluid within the flow-line to create a mixture of formation fluid and reagent in the flow-line.

3. (original) A method according to claim 2, wherein injecting reagent includes injecting reagent using a syringe pump.

4. (original) A method according to claim 2, further comprising establishing and storing baseline optical density values for at least one wavelength prior to injecting reagent.

5. (original) A method according to claim 2, wherein injecting reagent includes injecting a predetermined volume of reagent.

6. (original) A method according to claim 5, further including adjusting the predetermined volume.

7. (original) A method according to claim 6, wherein adjusting the predetermined volume includes adjusting an injection period of time.

8. (withdrawn) A method according to claim 6, wherein adjusting the predetermined volume includes adjusting an injection pump rate.

9. (original) A method according to claim 5, wherein injecting reagent includes injecting reagent into a stopped formation fluid.

10. (withdrawn) A method according to claim 5, wherein injecting reagent includes injecting reagent into a flowing formation fluid.

11. (withdrawn) A method according to claim 2, wherein injecting reagent includes injecting reagent using wellbore overpressure.

12. (withdrawn) A method according to claim 11, wherein injecting reagent includes injecting reagent at a controlled rate using a restrictor.

13. (withdrawn) A method according to claim 11, wherein injecting reagent includes injecting reagent at a controlled rate using a throttle valve.

14. (withdrawn) A method according to claim 11, wherein injecting reagent includes injecting reagent for a controlled period of time.

15. (original) A method according to claim 2, wherein injecting reagent includes extracting formation fluid from a stopped flow-line.

16. (original) A method according to claim 15, wherein injecting reagent includes injecting a predetermined volume of reagent.

17. (original) A method according to claim 16, further including adjusting the predetermined volume.

18. (withdrawn) A method according to claim 17, wherein adjusting the predetermined volume includes setting an extraction pump rate.

19. (original) A method according to claim 17, wherein adjusting the predetermined volume includes setting an extraction time.

20. (original) A method according to claim 15, wherein extracting formation fluid includes using a syringe piston.

21. (withdrawn) A method according to claim 15, wherein extracting formation fluid includes using a flow-line pump.

22. (withdrawn) A method according to claim 15, wherein extracting formation fluid includes using a step piston.

23. (withdrawn) A method according to claim 22, wherein extracting formation fluid includes adjusting metering valve settings.

24. (original) A method according to claim 1, wherein storing reagent includes storing different reagents in first and auxiliary reagent containers.

25. (withdrawn-previously presented) A fluids analyzer for analyzing formation fluid in earth formation surrounding a borehole, comprising:

a probe for receiving downhole formation fluid from earth formation.

a flow-line coupled to receive formation fluid downhole from said probe;

a reagent container in fluid communication with said flow-line;

spectral analyzer means, coupled to receive a mixture of formation fluid and reagent from said flow-line downhole, for analyzing said mixture to produce time-series spectral; and

computing means for determining a characteristic of formation fluid from said spectral_data.

26. (withdrawn) A fluids analyzer according to claim 25, wherein said reagent container is a syringe pump.

27. (withdrawn)A fluids analyzer according to claim 25, wherein reagent in said reagent container is exposed to wellbore pressure.

28. (withdrawn)A fluids analyzer according to claim 27, further comprising a syringe pump fluid container coupled to extract fluid from said flow-line.

29. (withdrawn)A fluids analyzer according to claim 27, wherein said reagent container is coupled to said flow-line by a restrictor.

30. (withdrawn)A fluids analyzer according to claim 27, wherein said reagent container is coupled to said flow-line by a throttle valve.

31. (withdrawn)A fluids analyzer according to claim 27, further comprising a step piston coupled to extract fluid from said flow-line.

32. (withdrawn)A fluids analyzer according to claim 31, further comprising a metering valve between said step piston and said flow-line.

33. (withdrawn)A fluids analyzer according to claim 25, further comprising an auxiliary reagent container in communication with said flow-line independently of a first reagent container.

34. (cancelled)